



Figure 9. Virus-induced gene silencing—VIGS. A demonstration of VIGS in *Nicotiana benthamiana*, a plant related to tobacco, carrying an endogenous copy of a transgene construct (A) containing a 35S promoter (pro) driving GFP coding sequences (cod). (B) The tobacco rattle virus vector constructs are replicating RNA molecules that encode several proteins. The proteins include a viral RNA-dependent RNA polymerase (RDR), a movement protein (M), a suppressor of silencing (SS), and a coat protein (CP). The control virus vector (top) has no insert. The experimental constructs carried an insert corresponding either to “pro” or “cod.” The loss of green fluorescence in the plants infected with the experimental constructs indicated that there was gene silencing using both constructs (center); however, with the pro construct, silencing persisted into the progeny seedlings (right side).